



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,894	09/22/2006	Hiroshi Iwamoto	076476-0011	4397
53080                      7590                      03/05/2010 MCDERMOTT WILL & EMERY LLP 600 13TH STREET, NW WASHINGTON, DC 20005-3096				
EXAMINER				
DYE, ROBERT C				
ART UNIT		PAPER NUMBER		
1791				
MAIL DATE		DELIVERY MODE		
03/05/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/593,894

**Applicant(s)**

IWAMOTO ET AL.

**Examiner**

ROBERT DYE

**Art Unit**

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 4 and 6-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4 and 6-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-06)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This is a Non-Final Office Action in response to Applicant's Request for Continued Examination, filed 11/18/2009. Claims 1, 4, 6-9 are pending.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1, 4 and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yutaka (JP 2002-137225, with English machine translation of record) in view of Wold (USP 2,364,334) and further in view of either Argiropoulos (USP 5,787,751), Wickham (USP 6,209,431) or Gross (USP 2,299,818).

5. Regarding claims 1 and 4, Yutaka discloses an apparatus and method for removing a dissimilar material attached to a plastic product from said product comprising placing the plastic product on an attaching part 12 (seat unit) and punching

out the material via a punch (construed as blade unit) which reciprocates in the vertical direction (abstract and Figure). Regarding the seat unit, Yutaka discloses that the attaching part 12 holds the plastic part to be cut and comprises a table 50, a slider 52 and a base 54 (see paragraphs [0018-0019]). The construction allows for the table to be movable in the X and Y direction so as to position the plastic product. The seat unit thus moves in the X-Y plane which is perpendicular to the direction in which the working unit moves the blade unit (Z or vertically).

6. Yutaka teaches a working unit which is located above the blade unit. Yutaka does not teach a method or apparatus wherein the working unit is located lower than the seat unit and the use of inclined chutes which are disposed beside the working unit in order to guide the punched out material.

7. In the same field of endeavor of cutting apparatus and methods, Wold discloses a cutting device which comprises a supporting table 19 (analogous to seat unit in Yutaka) on which the article is placed, a reciprocal cutting element 37 (blade unit) (which cuts in a vertical motion), and a crank case 17 (working unit) located below the seat unit (see Fig. 1). Wold teaches that it is advantageous to support the blade unit from below (thus locating the working unit below the seating unit) because the usual supporting standard is eliminated which removes the limit to the lateral dimensions of the article being cut (pg 1, col 1, lines 22-27). Wold further discloses an inclined chute 59 which is disposed adjacent to the working unit and serves to direct the cut material to a collection box (pg 3, col 1, lines 14-18). It would have been obvious to a person having ordinary skill in the art at the time of the invention to have located the working

unit below the seating unit and employed a chute as taught by Wold in the method and apparatus of Yutaka for the purpose of eliminating the supporting structure for the cutting unit and thus removing limitations to the size of the article being cut.

8. The combination does not teach the use of a second guide unit for guiding cut material which is disposed on the opposite side of the working unit from the first guide unit. However, the use of multiple chutes in a cutting machine to direct cut materials is well-known in the art as evidenced by Argiropoulos (directs cut materials to different processing stations, abstract), Wickham (discloses multiple chutes 51 disposed adjacent to each other in order to direct cut materials to a scrap bin 44, col 6, lines 27-33) and Gross (multiple chutes 44 for directing different portions of cut materials away from the cutting device to individual containers, pg 1, col 2, lines 50-55). It would have been obvious to a person having ordinary skill in the art at the time of the invention to employ a second chute as taught by Argiropoulos, Wickham, or Gross in the method/apparatus of Yutaka (combined) for the purpose of directing cut materials away from the cutting unit and into a collection container or further processing station. One could be motivated to direct materials to different processing stations (Argiropoulos), separate different material cuts (Gross) or to use multiple chutes to collect stray materials over a wider area (Wickham).

9. The cited prior art does not teach the alignment of the first guide unit, the working unit, and a second guide unit in a direction which is parallel to the plane in which the working unit moves. The chutes of Wold, Argiropoulos, Wickham and Gross provide inclined passages for the cut material to travel down under the force of gravity. Their

position with respect to the working unit is a mere matter of engineering design choice and it would have been obvious to a person having ordinary skill in the art to place the chutes and collectors in appropriate positions to allow for their operation. It would have been obvious to a person having ordinary skill in the art at the time of the invention to align the chutes and working unit as claimed, since it has been held that a mere rearrangement of elements without modification of the operation of the device involves only routine skill in the art. In re Japikse, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950).

10. Regarding claims 6-9, wherein a collection box is arranged to collect material guided by the first or second guide units, Yutaka discloses a recovery box 20 (collection box) for collecting the cut material. Wold also teaches the chute 59 (guide unit) can direct cut material to a "suitable receptacle" that is placed on the base of the device (such would be disposed beside the working unit, pg 3, col 1, lines 15-18).

### ***Response to Arguments***

11. Applicant's arguments with respect to claims 4 and 8 under U.S.C. 102(b) have been considered but are moot in view of the new ground(s) of rejection necessitated by amendments to the claims.

12. Applicant's arguments, filed 11/18/2009, with respect to the rejections under U.S.C. 103(a) have been fully considered but they are not persuasive.

13. In summary, Applicant argues that the cited prior art does not disclose or render obvious a seat unit arranged to be movable relative to the working unit in a plane which is perpendicular to a first direction in which the working unit moves the blade unit and

that the first guide unit, the working unit, and the second guide unit are aligned in a second direction which is parallel to the plane.

14. Examiner disagrees. Wold teaches the arrangement of a first guide unit and working unit in the same plane which is parallel to the surface upon which the workpiece is supported and perpendicular to the reciprocal motion of the cutting unit. Although Wold does not teach the use of a second chute, the use of multiple chutes is well known in the cutting device art for the purpose of directing the material away from the cutting device and for ensuring the collection of said cut materials. While the prior art of record does not expressly teach the claimed arrangement of the first guide unit, working unit, and second guide unit, such is an obvious matter of design choice. A mere rearrangement of elements without modification of the operation of the device involves only routine skill in the art. In re Japikse, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950). One would be motivated to choose an arrangement which allows for the chutes to direct cut materials away from the cutting unit while still allowing for the working unit to actuate the cutting unit. As noted by Wold, it is advantageous to locate said parts below the workpiece table so as to not restrict the dimensions of the workpiece. Simply choosing the order in which to arrange the parts below the table is an obvious matter of design choice.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT DYE whose telephone number is (571)270-

7059. The examiner can normally be reached on Monday to Friday 8:00AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Del Sole can be reached on (571)272-1130. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/RCD/

/Joseph S. Del Sole/  
Supervisory Patent Examiner, Art Unit 1791